IN THE CLAIMS

Please amend the claims as follows:

1. (Currently Amended) A method for dynamically routing a data packet through a Content Distribution Network (CDN), comprising:

receiving a routing table for a CDN and a data packet, wherein the routing table represents a desired path and alternative paths through the CDN, and wherein each path represents links between an entry node, intermediate nodes, and a destination node;

evaluating policies associated with currently available links for currently available paths at the entry node [[or]] and at each [[one]]of the intermediate nodes, when the data packet is received on the entry node and when the data packet is received on each of the intermediate nodes;

reordering currently available intermediate nodes within the routing table for the currently available links, when [[if]]the policies are triggered by current conditions of the currently available intermediate nodes; and

routing the data packet to a next available intermediate node of the routing table, wherein the next available intermediate node is one of the currently available intermediate nodes, and wherein at least one intermediate node selects the next available intermediate node that is associated with one of the alternative paths.

2. (Original) The method of claim 1 further comprising iterating the processing for evaluating, reordering, and routing at each intermediate node that receives the data packet until the data packet reaches the destination node.

3. (Original) The method of claim 1 wherein the evaluating further comprises comparing policy threshold metrics to the currently available intermediate nodes' processing load levels for determining whether to trigger actions associated with the policy threshold metrics.

4. (Original) The method of claim 3 further comprising, processing one of the actions to promote or demote one or more of the currently available intermediate nodes within the routing table.

5. (Original) The method of claim 1 wherein the evaluating further comprises comparing policy priority metrics to the currently available intermediate nodes' data traffic for determining whether to trigger actions associated with the policy priority metrics.

6. (Original) The method of claim 5 further comprising, processing one of the actions for suspending existing traffic associated with one of the currently available nodes in order to accommodate the routing of the data packet based on the policy priority metrics associated with the data packet.

7. (Original) The method of claim 1 wherein the evaluating further includes comparing policy bandwidth utilization metrics against existing bandwidth utilization levels associated with the currently available intermediate nodes for determining whether to trigger bandwidth utilization actions in order to load balance bandwidth use within the CDN.

8. (Currently Amended) A method for dynamically a data packet routing through a Content Distribution Network (CDN), comprising:

associating policies with a routing table, wherein the routing table includes a desired path and one or more alternative paths, and wherein each path includes links between an entry node, intermediate nodes, and a destination node;

evaluating, at a receiving node identified in the routing table, the policies when the receiving node acquires a data packet, and wherein the receiving node is one of the intermediate nodes; and

reordering, at the receiving node, next available intermediate nodes within the routing table when the policies are triggered to change routing from the desired path to one of the alternative paths.

9. (Original) The method of claim 8 further comprising, identifying the entry node as an initial receiving node.

10. (Currently Amended) The method of claim 9 further comprising, notifying, by the initial receiving node, remaining intermediate nodes within the routing table for any reordering of the routing table that occurs.

11. (Original) The method of claim 8 wherein the evaluating further comprises using policies associated with at least one of next intermediate node bandwidth utilization levels, next intermediate node utilization levels, and next intermediate node traffic priority assignments.

12. (Original) The method of claim 8 wherein the associating further comprises assigning the policies to the links established between the nodes and forming the desired path and the one or more alternative paths.

13. (Original) The method of claim 8 further comprising preventing previously demoted intermediate nodes from being promoted at the receiving node when reordering of the routing table occurs.

14. (Original) The method of claim 13 further comprising, using a formal notation to update the routing table or the policies in order to identify the previously demoted intermediate nodes.

15. (Currently Amended) A system for dynamically routing a data packet through a Content Distribution Network, comprising:

a routing table including a desired path and one or more alternative paths, wherein each path includes links from an entry node through intermediate nodes to a destination node;

policies associated with the links of the paths, wherein each link is associated with two connecting nodes; and

a routing module that evaluates the policies associated with currently available links of the paths when a data packet is received and is to be routed though one of the currently available

links, and wherein the routing module reorders currently available intermediate nodes associated with the currently available links within the routing table when the policies are ~~triggered~~ triggered;

wherein the system is processed by at least one of a cache accelerator, a router, a gateway, a firewall, a network hub, a network switch, a network bridge, or a customized application, and wherein the routing module processes on the entry node, the intermediate nodes, and the destination node.

16. (Original) The system of claim 15 wherein the policies are configurable based on the CDN or a data type associated with the data packet.

17. (Original) The system of claim 15 wherein the policies include node bandwidth utilization metrics, node load metrics, and node traffic priority metrics.

18. (Original) The system of claim 15 wherein the entry node and each of the intermediate nodes of the routing table processes the routing module when the data packet is received.

19. (Original) The system of claim 15 wherein if the routing module reorders the routing table, then polices are updated and routed to the currently available intermediate nodes.

20. (Cancelled).

21. (Currently Amended) A Content Distribution Network (CDN) routing data structure implemented in a computer readable medium for dynamically routing a data packet through a content distribution network, comprising:

a routing table associated with a desired path and one or more alternative paths, each path having links, and each link represents connections between pairs of an entry node, intermediate nodes, and a destination node; and

policies associated with each link of the paths, wherein the policies are processed by the entry node and the intermediate nodes to reorder the intermediate nodes of the routing table

while routing the data packet through the CDN, and wherein at least one intermediate node changes routing of the data packet from the desired path to one of the alternative paths in response to processing the policies when that particular intermediate node receives the data packet.

22. (Original) The CDN routing data structure of claim 21 wherein if a reordering of the routing table occurs at an entry node or a particular intermediate node, the reordering is not communicated to a receiving intermediate node.

23. (Original) The CDN routing data structure of claim 21 wherein the policies are selected based on any reordering that previously occurred within the routing table.

24. (Original) The CDN routing data structure of claim 21 wherein formal notation is associated with and used to identify any reordered nodes, and the formal notation is used in either the routing table or the policies and is accessible to the entry node and the intermediate nodes.

25. (Original) The CDN routing data structure of claim 21 wherein the policies include metrics associated with at least one of bits per second currently being transmitted by currently available intermediate nodes, bits per second currently being received by the currently available intermediate nodes, current priority traffic assigned to currently available links associated with the currently available intermediate nodes, and actions currently being processed on the currently available intermediate nodes.